

HOW YOUR MARGARINE IS MADE . . .



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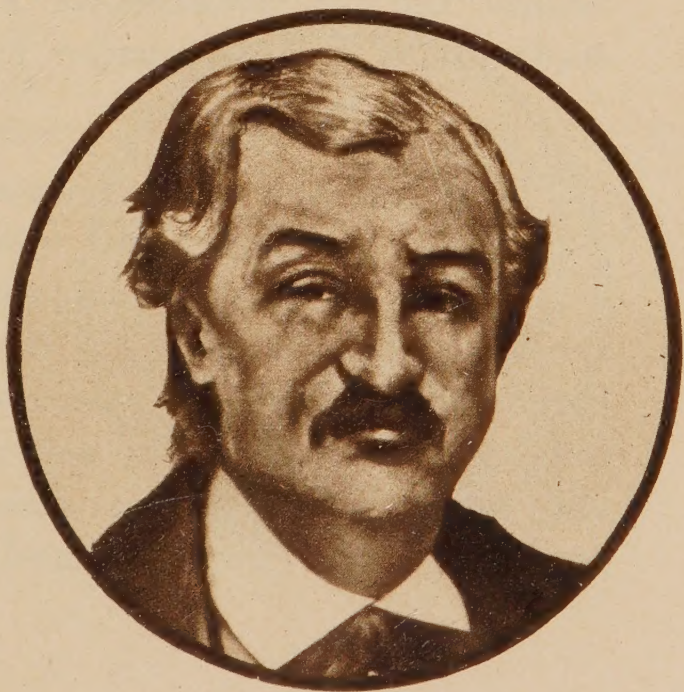
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M A R G A R I N E

*M*ARGARINE is now such an important article of every-day diet that it is difficult to realise that it is only about 60 years since it was first manufactured. In the year 1870 butter was so expensive in France that Napoleon III asked a celebrated scientist, whose name was Mège-Mouries, to make a butter substitute. Setting to work on the problem, Mège-Mouries noticed that when cows were not given their food, they still yielded milk, although they lost quickly in weight. It was possible, he found, to make butter from this milk; and so Mouries reasoned that the butter must come from the body fat of the animal. He reasoned that if this were the case, he, too, should be able to get butter fat from a cow's own fat, if a suitable method could





be discovered. He succeeded eventually in making a butter substitute, and he was granted a patent for his process in the year 1874.

His method of making this alternative to butter was to take the fatty part of good fresh beef

and to subject it to a simple process, by which he obtained a substance that was yellow in colour, odourless, and with a very pleasant flavour. He called it "Oleo-margarine," or in abbreviation, as it is now known, Margarine.

Since the time of Mège-Mouries many big improvements have been made in margarine manufacture, but the fundamentals of his method still apply to-day in the margarine industry.

MANY new oils and raw materials have been introduced and modern methods and machinery employed. The raw materials comprise coconut oil made from delicious sweet coconuts, oil made from palm kernels, from ground nuts, from Sesame seeds, and many other edible oils, which are found in abundance in natural products. Fresh milk is also used in great quantities,

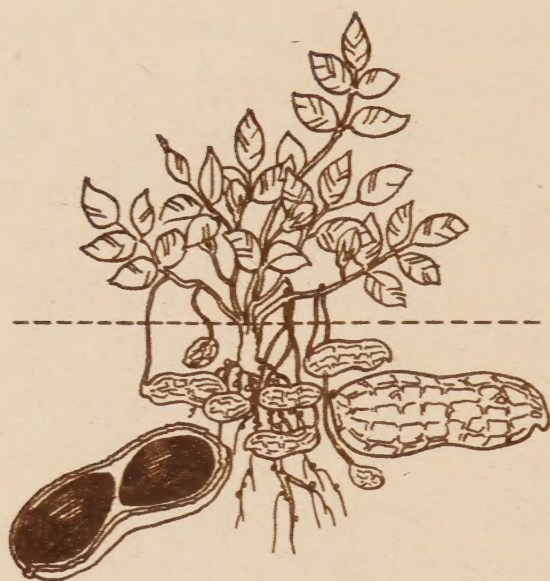
and hundreds of churns-full of cows' milk are delivered to the Margarine Works every day.

The coconuts are cleaned and ground into small pieces, and the oil is withdrawn from them by means of very powerful presses, or other methods of extraction. Sesame oil is recovered in a similar way from seeds of the Sesame plant ; ground nut oil from the ground nut, and Soya oil from the Soya plant cultivated in the Far East, and so on.

All these wholesome oils are very carefully refined in huge Refineries, where they are made sweet and colourless.

Milk comes to the factory fresh twice every day. It is separated and pasteurised ; that is to say, it is heated for half an hour so that any germs that may have got into the milk





externally (and also certain types of bacteria which milk contains in itself) are destroyed.

The milk is soured with special "cultures" to give it that fine butter flavour which we all like so much. Clever experts devote their

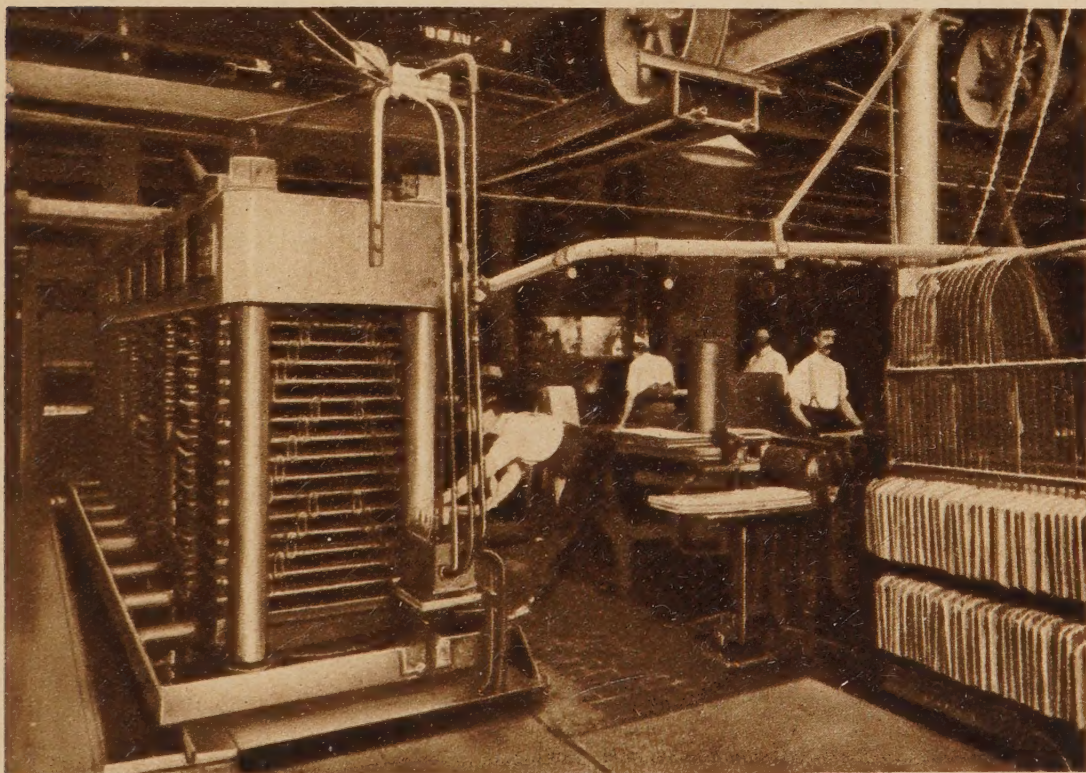
whole time to the preparation of these wonderful milk cultures in order that the quality of the margarine shall always be uniform and of the best.

After standing from 12 to 18 hours with these cultures, the milk is ready for further use. The sweet-tasting oils are mixed together with the milk in huge churns.

These enormous churns, kept scrupulously clean by white-coated attendants, are provided with stirrers and with inlet and outlet devices. The milk and oils are churned together,



and the creamy mixture which results is rapidly cooled and solidified on leaving the churns. In one method the mixture meets a stream of ice-cold water immediately on leaving the churn and is solidified into a glistening mass which looks like a mass of pearls. In another method, the mixture does not meet the water in direct contact, but is led over a large cooling drum, on which it solidifies in the form of a very thin layer. The drum revolves slowly and continuously, and the thin layer is cut from it automatically by finely adjusted knives. It falls from these knives into aluminium trucks below, and is then taken to a special mill, which is a kind of kneader. Here the margarine is



One of the powerful presses which extract the oils

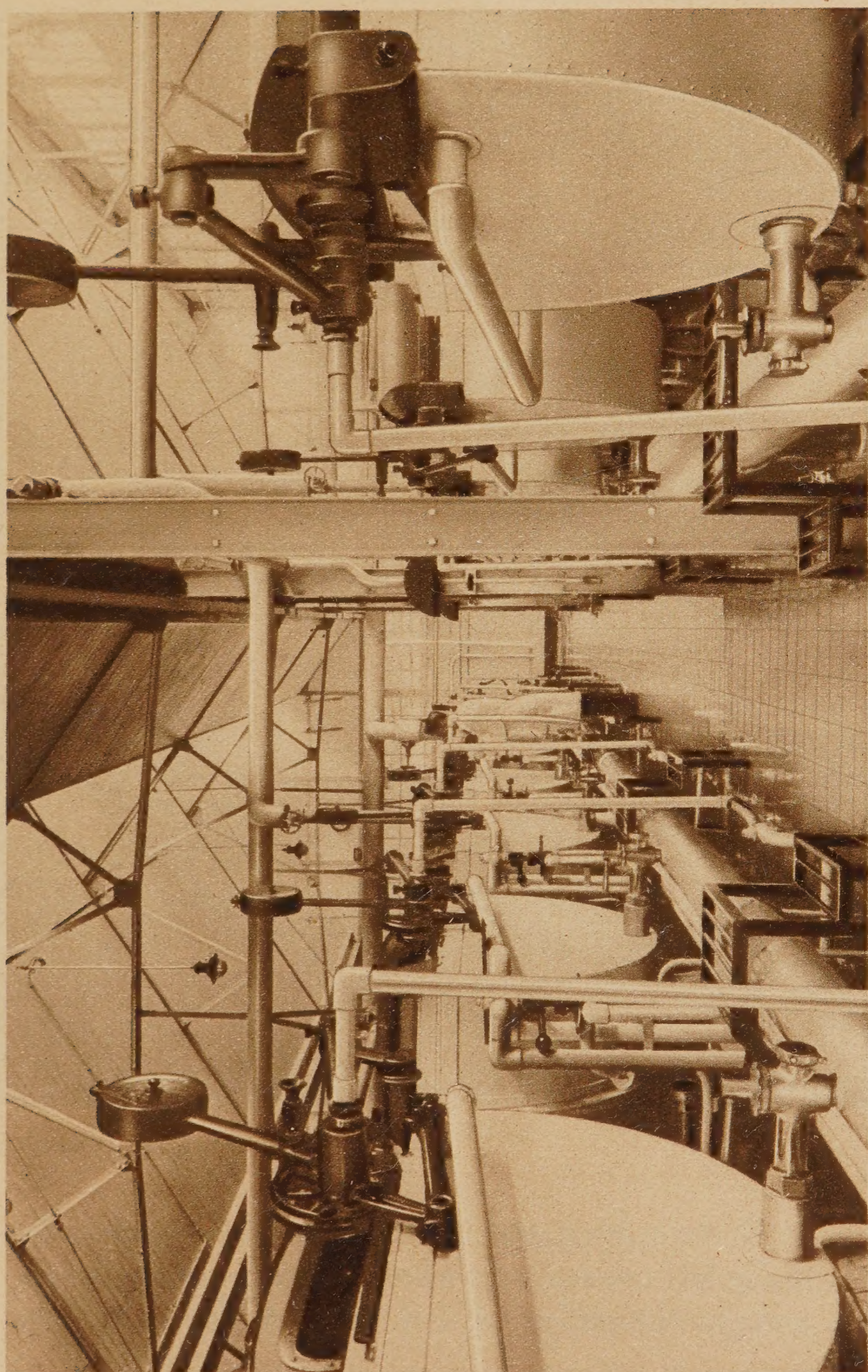
pummelled and kneaded by the machine, and a small quantity of pure salt is added to give flavour, while any excess of moisture is pressed out. After the margarine has passed through several kneaders it is allowed to stand in a cool room for a period, and then it passes to the packing room where wonderful machines, almost human in their ingenuity, cut and wrap half-pounds or pounds with absolute accuracy.

WHERE MARGARINE IS MADE

A VISIT to a model margarine factory is a revelation in up-to-date hygiene. Absolute cleanliness is insisted upon everywhere. All the machinery necessary for manufacture is arranged so that human hands do not touch the product from start to finish.

The first thing that strikes one on entering a margarine factory is the wonderful cleanliness which is apparent everywhere. Every nook and corner is kept scrupulously clean. All the workers are required to wear white aprons and caps which must be changed frequently and kept spotless.

All the raw materials—the oils, the fats and the milk—must show the highest degree of purity. Ingredients are refined again and again. Thousands of gallons of fresh milk from selected farms are daily subjected to searching tests to ensure absolute purity.



Tanks in which the Milk is prepared



General view

The weighing and packing is done by cleverly designed machinery, which works automatically and continuously. Every part of the expensive



Packing Room

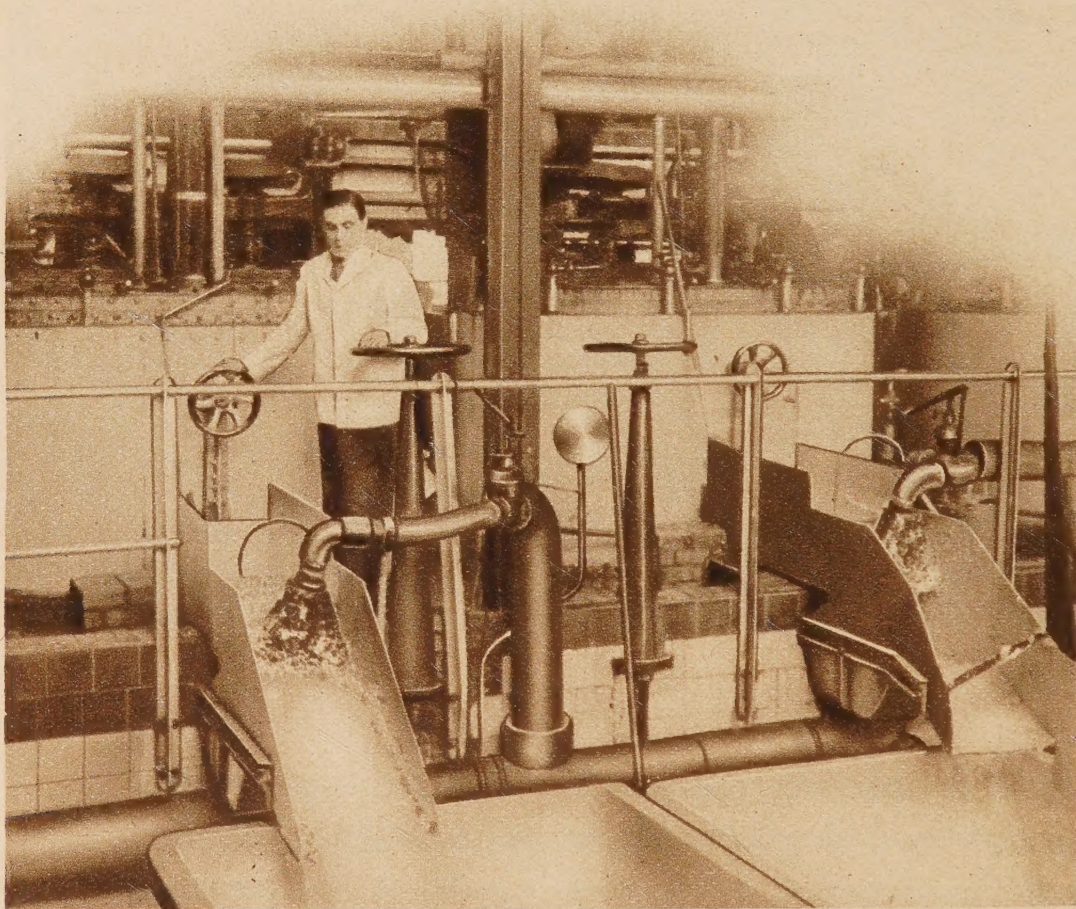
plant is specially designed to ensure absolute protection from the slightest impurity, even the aluminium containers are rounded inside at the corners

so that no residue is harboured when the containers are emptied.

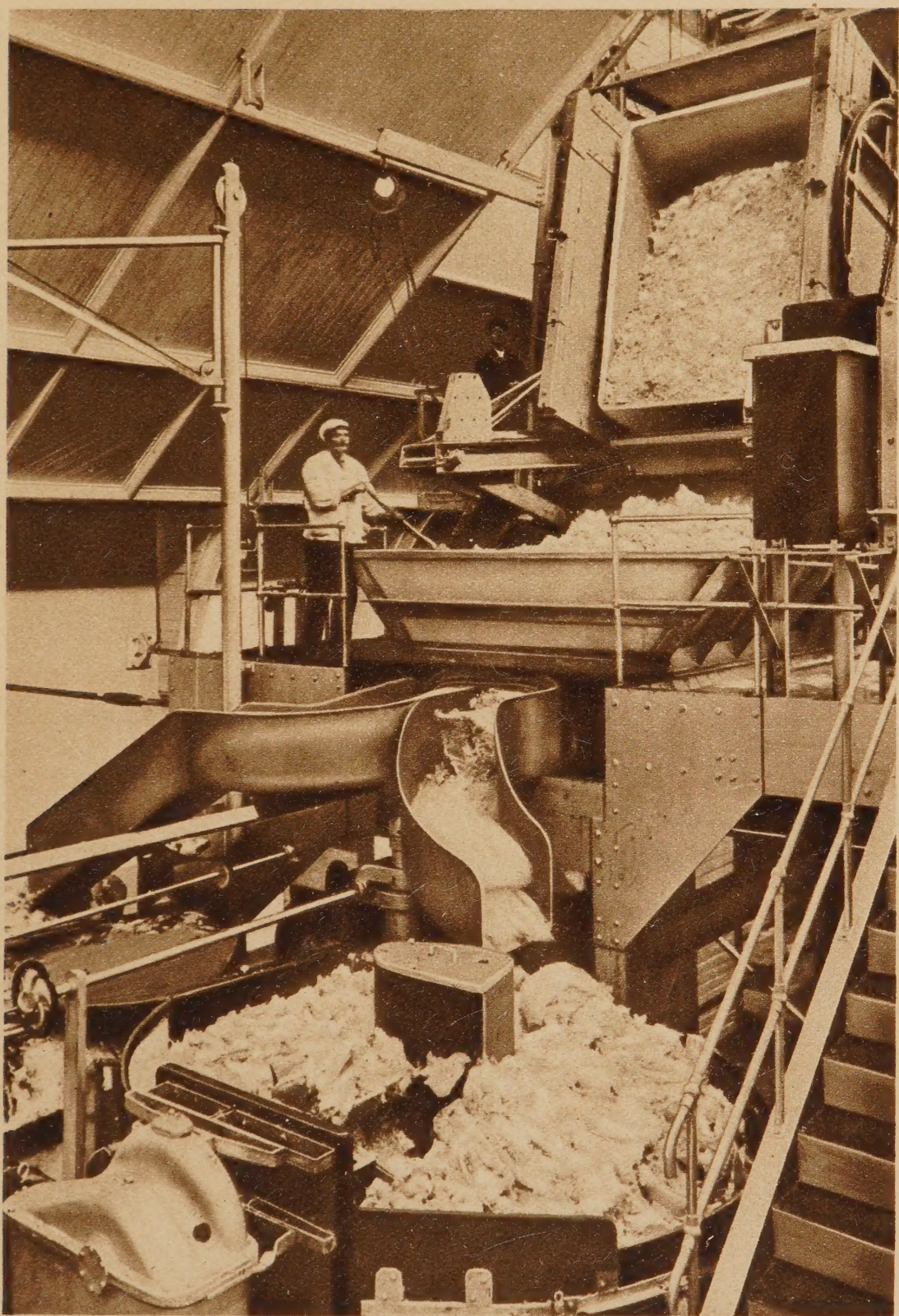
Each machine has a white-coated girl attendant, and delivers hundreds of packets every hour, carefully and accurately wrapped.

These packets are finally packed in boxes, which are first conveyed to a cool warehouse ; from there they are taken daily by train or by vans to the shops and to depots, where the margarine arrives in beautifully fresh condition.

You will easily realise from this short description of



The creamy mixture solidifies on contact with ice-cold water



View of revolving table on which the margarine is kneaded

a model margarine factory that no food could be prepared under more hygienic conditions or from more carefully-tested ingredients than margarine.

Good margarine, made from high-grade materials, in an up-to-date factory, is among the purest, most reliable and nutritious foods you can buy.

In appearance, in flavour and aroma, good margarine can hardly be distinguished from natural butter. Its quality depends greatly on the quality of the raw materials used, and on the method of manufacture. Good margarine, made from high-grade materials in an up-to-date factory, is always dependable.

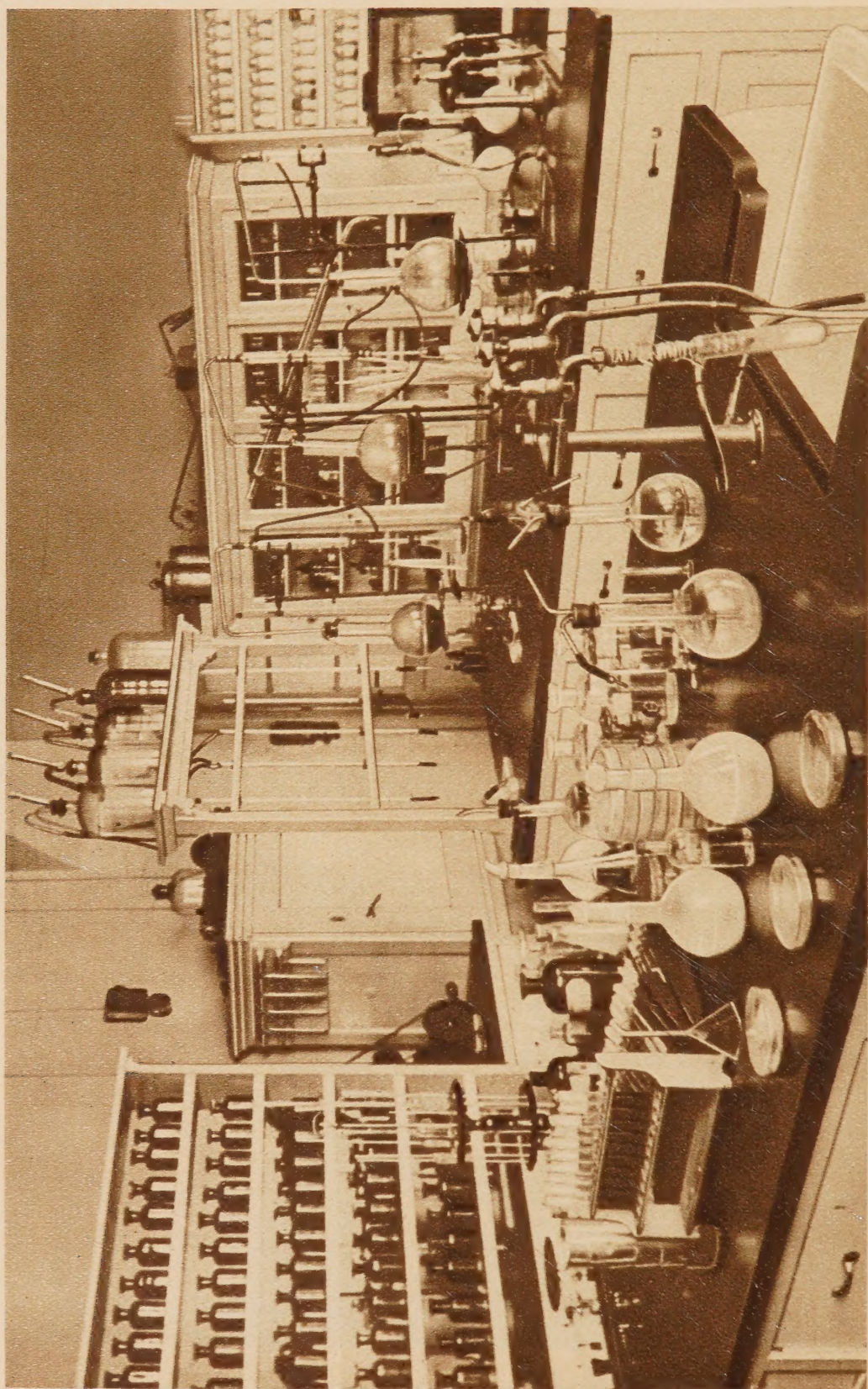
THE FOOD VALUE AND DIGESTIBILITY OF MARGARINE

IT will be seen from the foregoing that margarine was designed from the very beginning with the sole idea of having valuable food value and nourishing properties equal to butter. It was to this end that the original experiments of Mège Mouries were devoted. He set himself to discover the actual origin of the nutritive element in butter, and once this was traced the problem of food value and nourishment was satisfactorily solved.

Since then constant improvements in the supply and preparation of the necessary food-giving ingredients have been made. The natural foods that



Another part of the kneading process, showing spiral conveyor



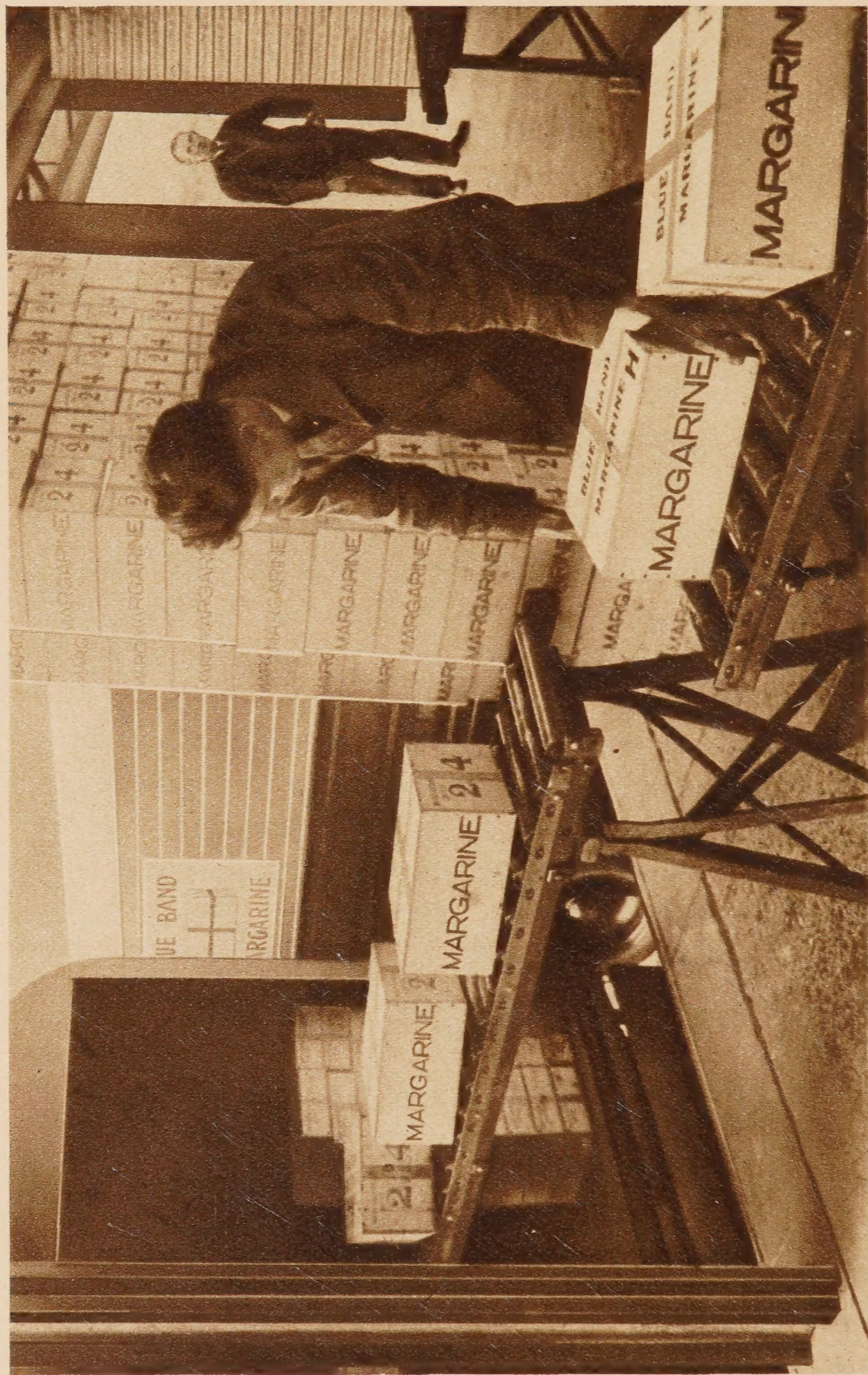
A corner of the Laboratory

have the particular body-building properties required have been sought and gathered from all parts of the world. The best sources of supply have been traced and developed—and most of these it is satisfying to note are among the varied riches of the British Empire.

As a result it is now possible to make certain at all times of an unvarying and constant sufficiency of the elements that are needed. The many valuable nuts and rich food giving oils and the well-known health-building properties of milk make certain that the necessary nutritive elements are contained in margarine. And the experts tell us that in *proteins* margarine is actually *richer* than butter.

It must be pointed out, however, that the inclusion of the necessary body-building foods in a product does not always mean that they are of the kind which the body can easily absorb. In margarine this is another problem that has been solved. The lactic cultures which were introduced originally to produce the good flavour of butter are actually an aid to digestion.

Finally, the scrupulous care for hygiene which attends every process of the making of margarine is a highly important health factor. Your food cannot be too clean and fresh if it is to do you good. The absolute cleanness and the purity of any well-known brand of margarine is assured.



Conveyor loading into rail van or motor lorry



It leaves the factory ready packed and wrapped in convenient pound and half-pound packets, and is untouched by hand till it is bought and opened.



DON'T JUST ASK FOR "MARGARINE" AT YOUR GROCER'S!

When you buy margarine always ask for one of the brands with *bands*. All Van den Bergh lines have distinguishing coloured bands, and when purchasing them you are certain of getting a British-made margarine with all the good qualities that careful and scrupulously clean manufacture ensures.